

FASTRIV® F.E.A. AUTOMATION
(PRE-ANALYSIS (INPUT PHASE))

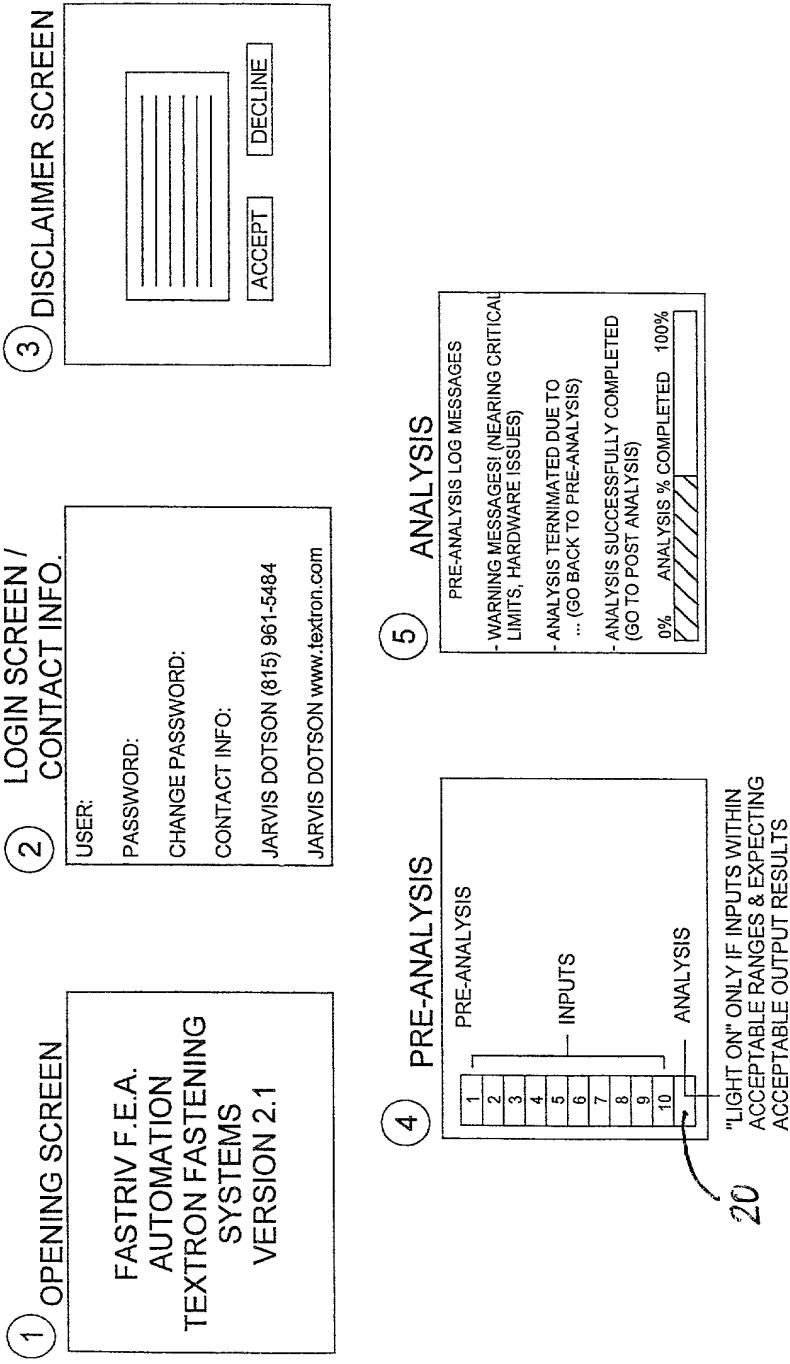
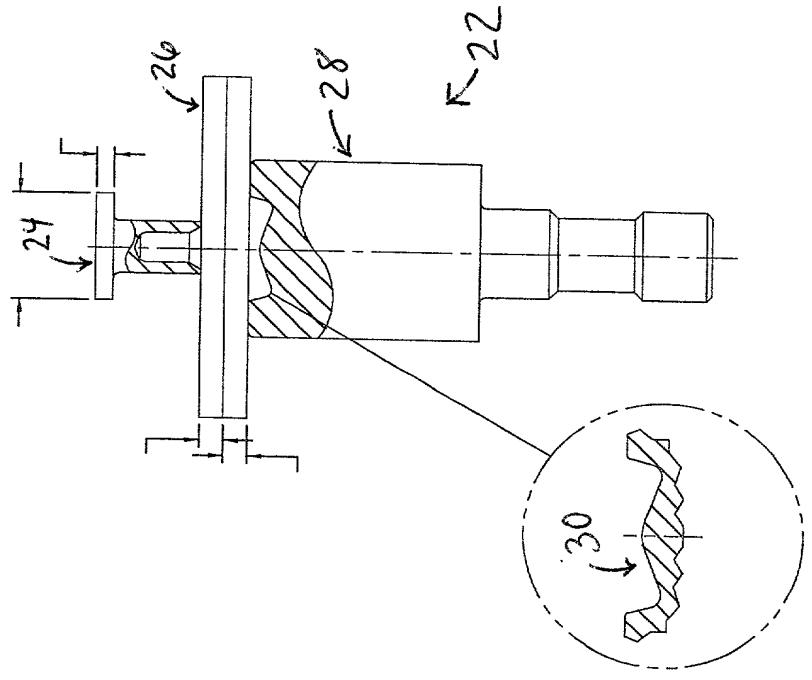


FIG. 1

FIG. 2



FASTRIV® F.E.A. AUTOMATION
(PRE-ANALYSIS (INPUT PHASE))

FILE EDIT PRINT

PROJECT
DEFINITION

RIVET
DEFINITION

JOINT
DEFINITION

INSTALLATION
EQUIPMENT
DEFINITION

ANVIL
DEFINITION

PLUNGER
DEFINITION

DESIGN
REQUIREMENTS

DATABASE
SEARCH

F.E.A.
PARAMETERS

POST
PROCESSOR

ANALYSIS
(LIGHT 'ON' OR 'OFF')

20

FASTRIV® F.E.A. AUTOMATION (PRE-ANALYSIS / PROJECT DEFINITION)	
FILE	EDIT
PROJECT DEFINITION	<u>PROJECT DEFINITION</u>
RIVET DEFINITION	CUSTOMER NAME: _____
JOINT DEFINITION	DATE: _____
INSTALLATION EQUIPMENT DEFINITION	ANALYSIS: _____
ANVIL DEFINITION	APPLICATION DESCRIPTION: _____
PLUNGER DEFINITION	INTRODUCTION: _____
DESIGN REQUIREMENTS	BACKGROUND: _____
DATABASE SEARCH	RESULTS: _____
F.E.A. PARAMETERS	CONCLUSION: _____
POST PROCESSOR	PROJECT NUMBER: _____
ANALYSIS (LIGHT "ON" OR "OFF")	✓ 20

FIG. 3

EASTRIV® F.E.A. AUTOMATION
(PRE-ANALYSIS (RIVET DEFINITION))

FILE	EDIT	PRINT
PROJECT DEFINITION		
RIVET DEFINITION		
JOINT DEFINITION		
INSTALLATION EQUIPMENT DEFINITION		
ANVIL DEFINITION		
PLUNGER DEFINITION		
DESIGN REQUIREMENTS		
DATABASE SEARCH		
F.E.A. PARAMETERS		
POST PROCESSOR		
ANALYSIS (LIGHT "ON" OR "OFF")		

PRE-ANALYSIS RIVET DEFINITION

HEAD STYLE: FLAT COUNTERSUNK HEAD
 ORDINARY OVAL HEAD
 TINMAN HEAD

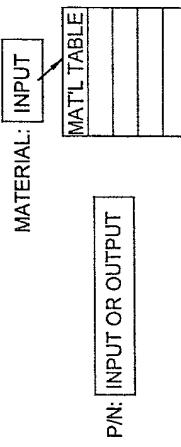
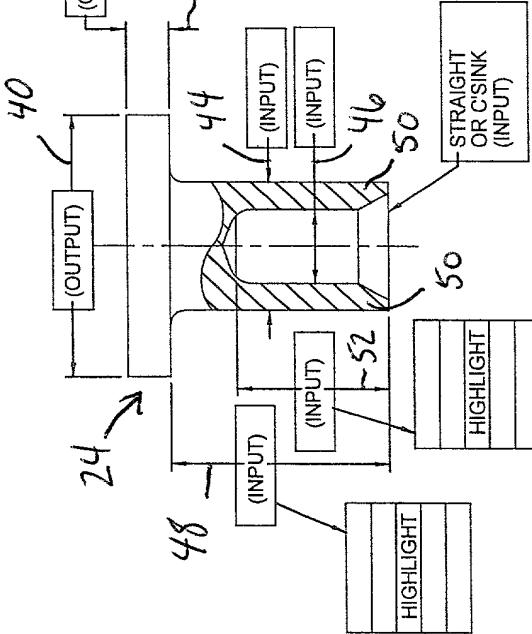


FIG. 4

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FIG. 5

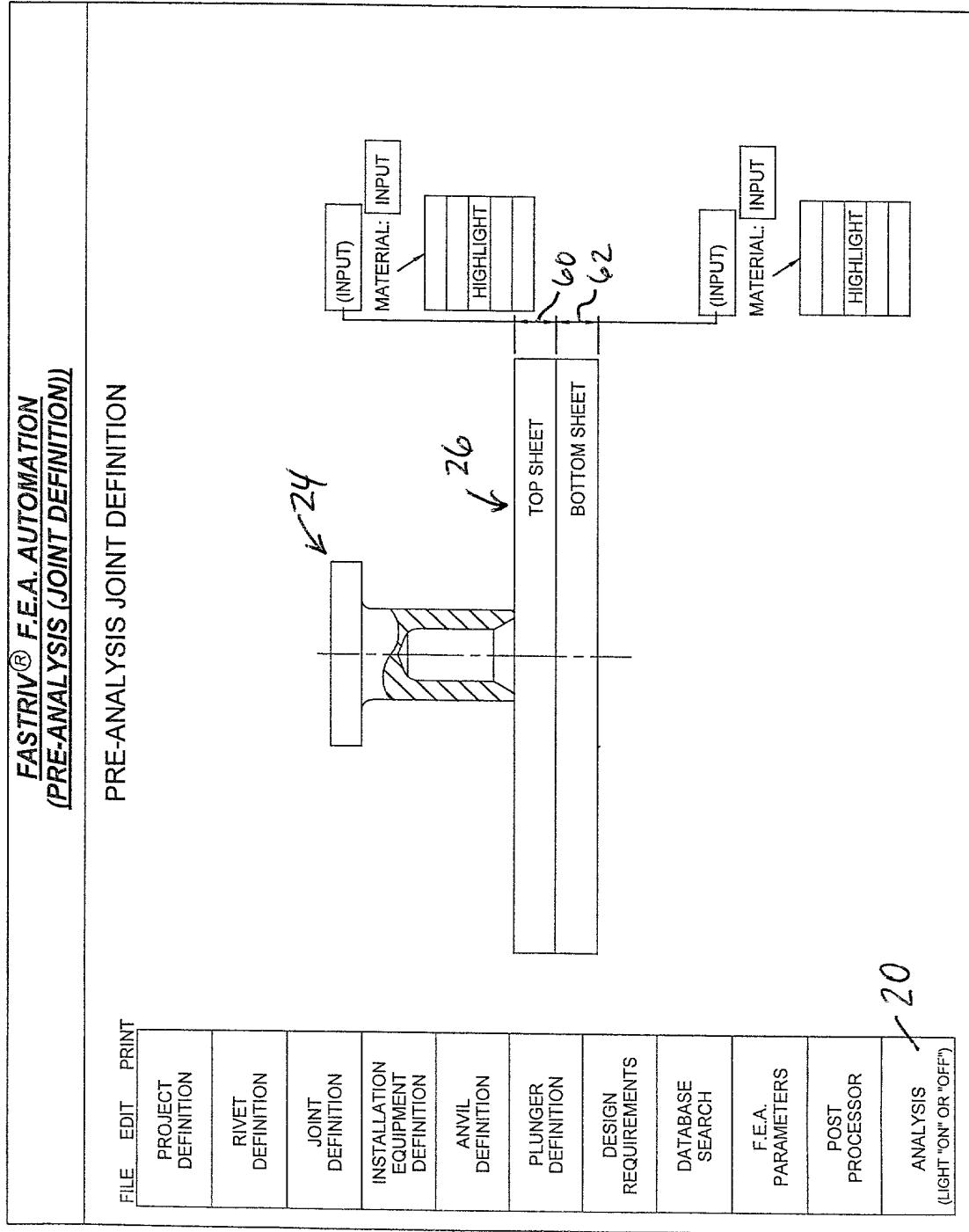
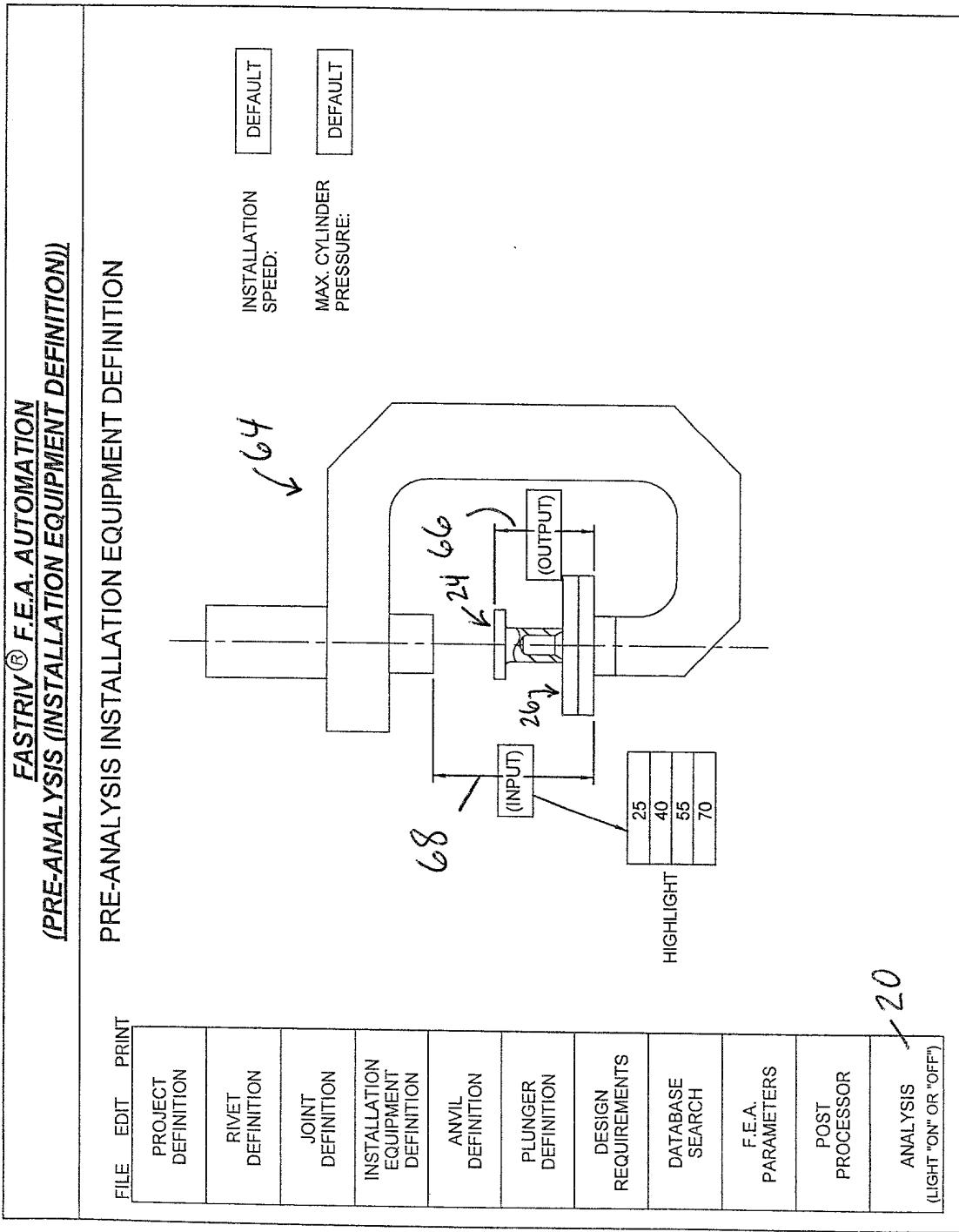


FIGURE 6



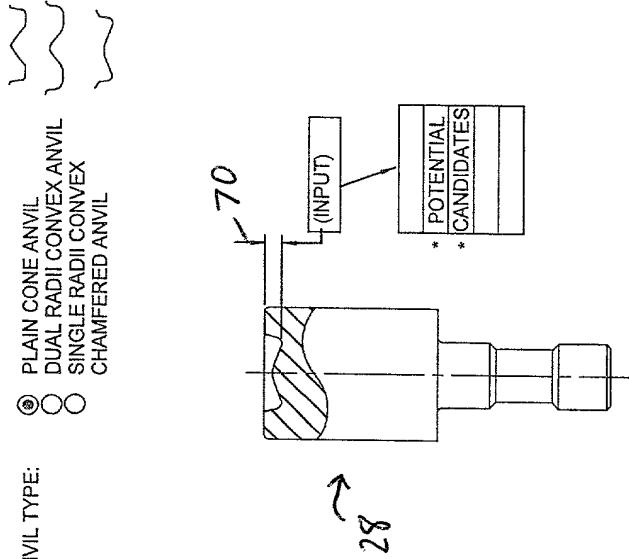
FASTRIV® F.E.A. AUTOMATION
(PRE-ANALYSIS (ANVIL DEFINITION))

FILE	EDIT	PRINT
PROJECT DEFINITION		
RIVET DEFINITION		
JOINT DEFINITION		
INSTALLATION EQUIPMENT DEFINITION		
ANVIL DEFINITION		
PLUNGER DEFINITION		
DESIGN REQUIREMENTS		
DATABASE SEARCH		
F.E.A. PARAMETERS		
POST PROCESSOR		
ANALYSIS (LIGHT "ON" OR "OFF")		

PRE-ANALYSIS ANVIL DEFINITION

ANVIL TYPE:

- PLAIN CONE ANVIL
- DUAL RADII CONVEX ANVIL
- SINGLE RADII CONVEX
- CHAMFERED ANVIL



INPUT

POTENTIAL CANDIDATES

* * *

70

28

MATERIAL: DEFAULT

P/N: INPUT OR OUTPUT * MODELED AS RIGID

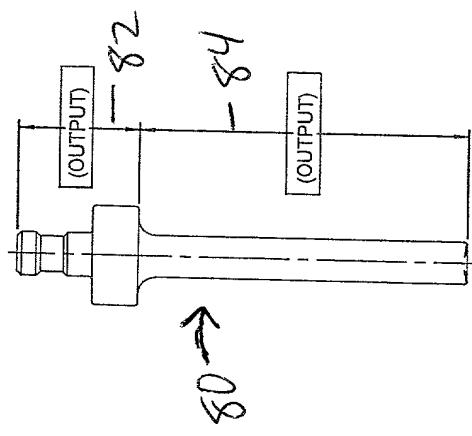
20

FIG. 7

FASTRIV® F.E.A. AUTOMATION
(PRE-ANALYSIS (PLUNGER DEFINITION))

FILE EDIT PRINT PRE-ANALYSIS PLUNGER DEFINITION

FILE	EDIT	PRINT	PROJECT DEFINITION
			RIVET DEFINITION
			JOINT DEFINITION
			INSTALLATION EQUIPMENT DEFINITION
			ANVIL DEFINITION
			PLUNGER DEFINITION
			DESIGN REQUIREMENTS
			DATABASE SEARCH
			F.E.A. PARAMETERS
			POST PROCESSOR
			ANALYSIS (LIGHT "ON" OR "OFF")



MATERIAL: DEFAULT

* MODELED AS RIGID

FIG. 8

FASTRIV® F.E.A. AUTOMATION
(PRE-ANALYSIS/DESIGN REQUIREMENTS)

FILE EDIT PRINT

PROJECT
DEFINITION

RIVET
DEFINITION

JOINT
DEFINITION

INSTALLATION
EQUIPMENT
DEFINITION

ANVIL
DEFINITION

PLUNGER
DEFINITION

DESIGN
REQUIREMENTS

DATABASE
SEARCH

F.E.A.
PARAMETERS

POST
PROCESSOR

ANALYSIS
(LIGHT "ON" OR "OFF")

RIVETED JOINT REQUIREMENTS

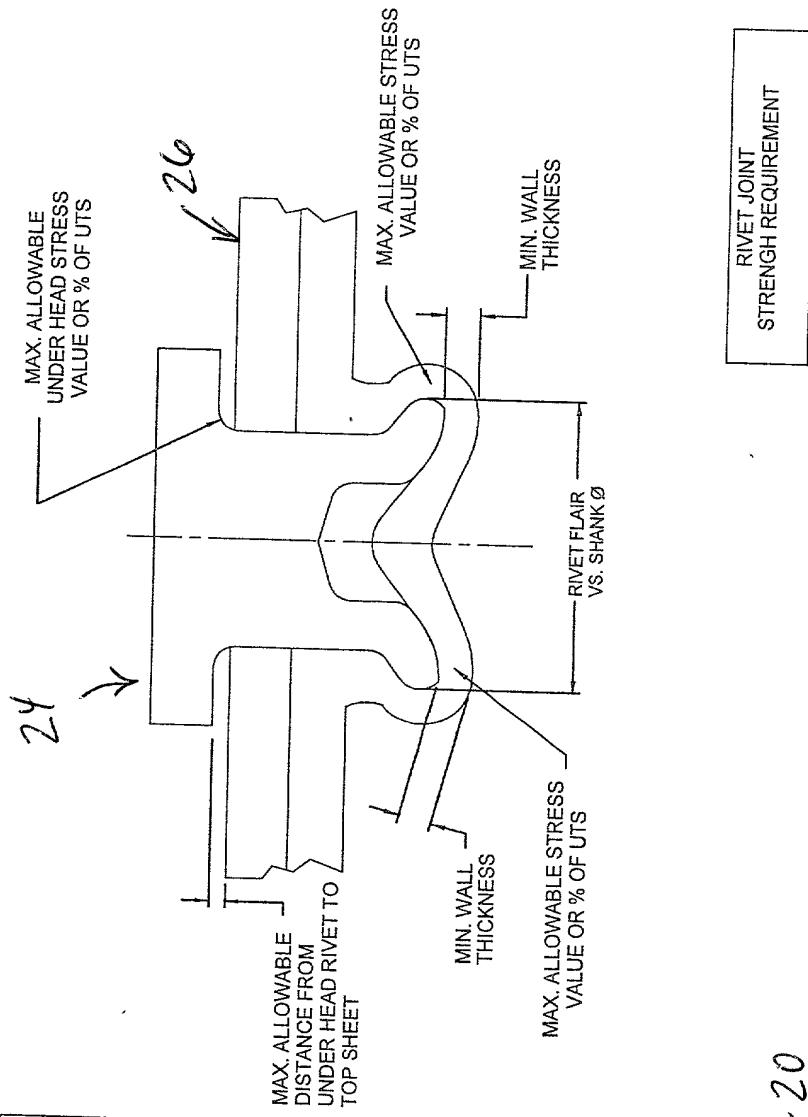


FIG. 9

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FASTRIV® F.E.A. AUTOMATION
(PRE-ANALYSIS DATABASE SEARCH)

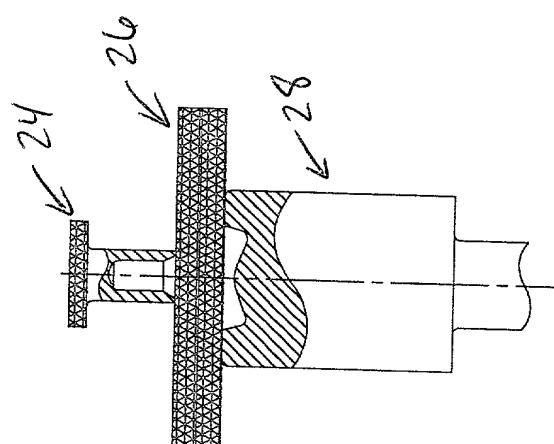
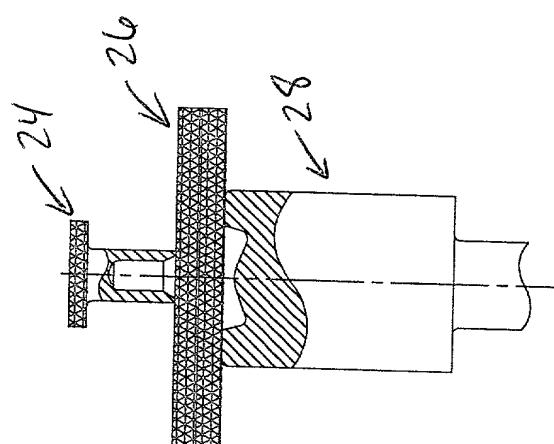
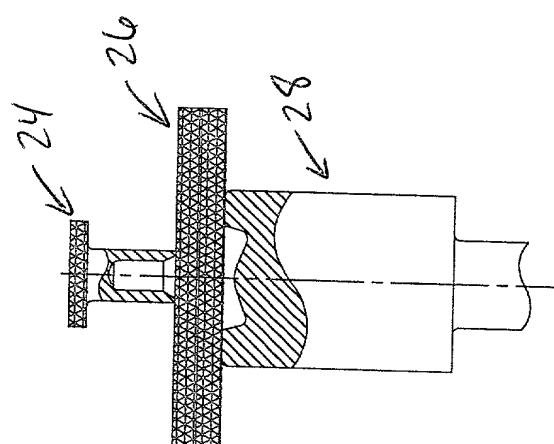
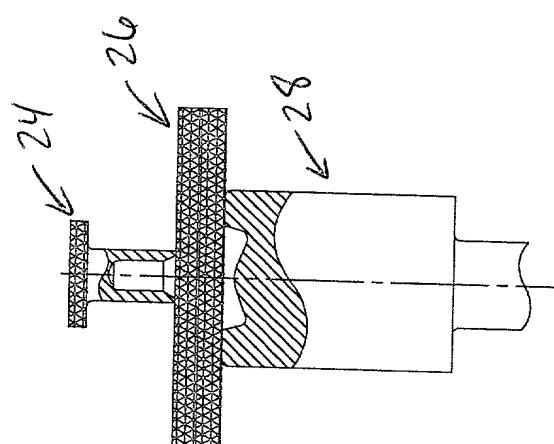
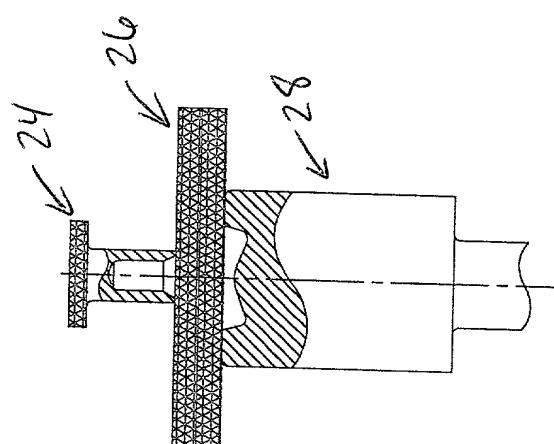
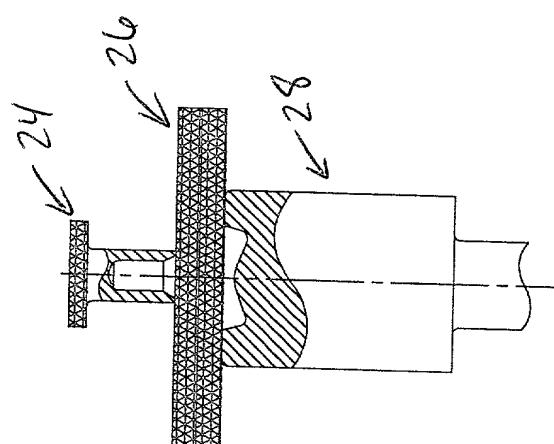
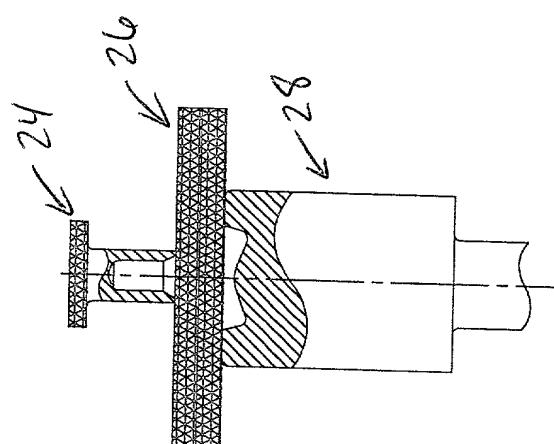
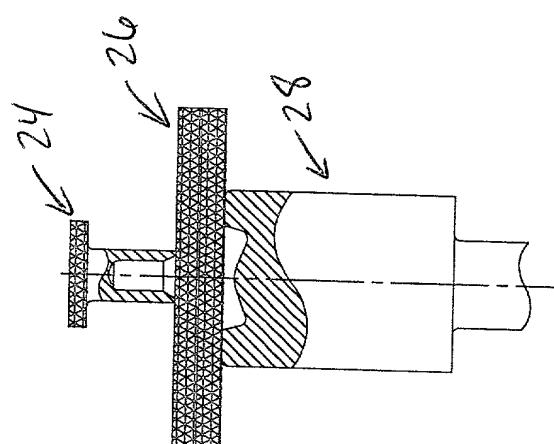
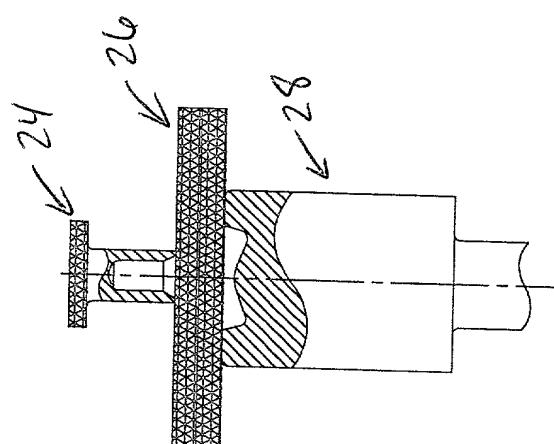
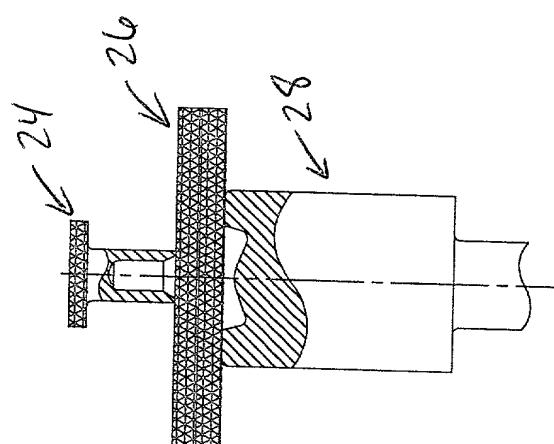
FILE EDIT PRINT

PROJECT DEFINITION	PRE-ANALYSIS DATABASE SEARCH
RIVET DEFINITION	
JOINT DEFINITION	
INSTALLATION EQUIPMENT DEFINITION	
ANVIL DEFINITION	
PLUNGER DEFINITION	
DESIGN REQUIREMENTS	
DATABASE SEARCH	
F.E.A. PARAMETERS	
POST PROCESSOR	
ANALYSIS (LIGHT "ON" OR "OFF")	

THE ABILITY TO SELECT
ANY OF COMBINATION
OF THE INPUTS AT THIS
STAGE. THIS WILL TIE
INTO A CENTRAL DATABASE

FIG. 10

FIG. 11

FASTRIV® F.E.A. AUTOMATION (PRE-ANALYSIS (F.E.A. PARAMETERS))	
FILE	EDIT
PROJECT DEFINITION	PRINT
RIVET DEFINITION	
JOINT DEFINITION	
INSTALLATION EQUIPMENT DEFINITION	
ANVIL DEFINITION	
PLUNGER DEFINITION	
DESIGN REQUIREMENTS	
DATABASE SEARCH	
F.E.A. PARAMETERS	
POST PROCESSOR	
ANALYSIS (LIGHT "ON" OR "OFF")	

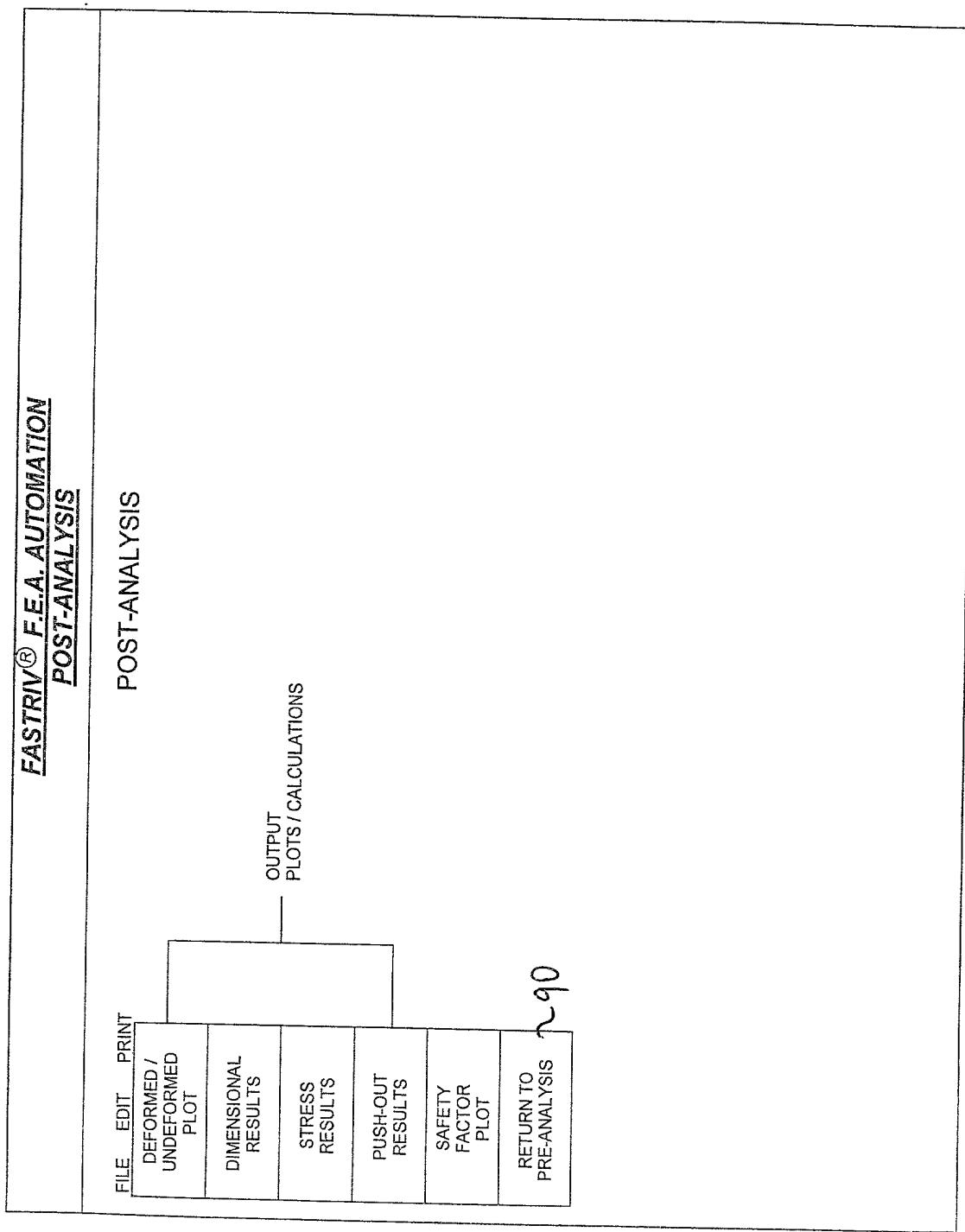
OBJECT: RIVET (MESH, BCC)
 TOP SHEET (MESH, BCC)
 BOTTOM SHEET (MESH, BCC)

INTEROBJECT BCC
OK

ADVANCED SETTINGS

20

FIG. 12



~90

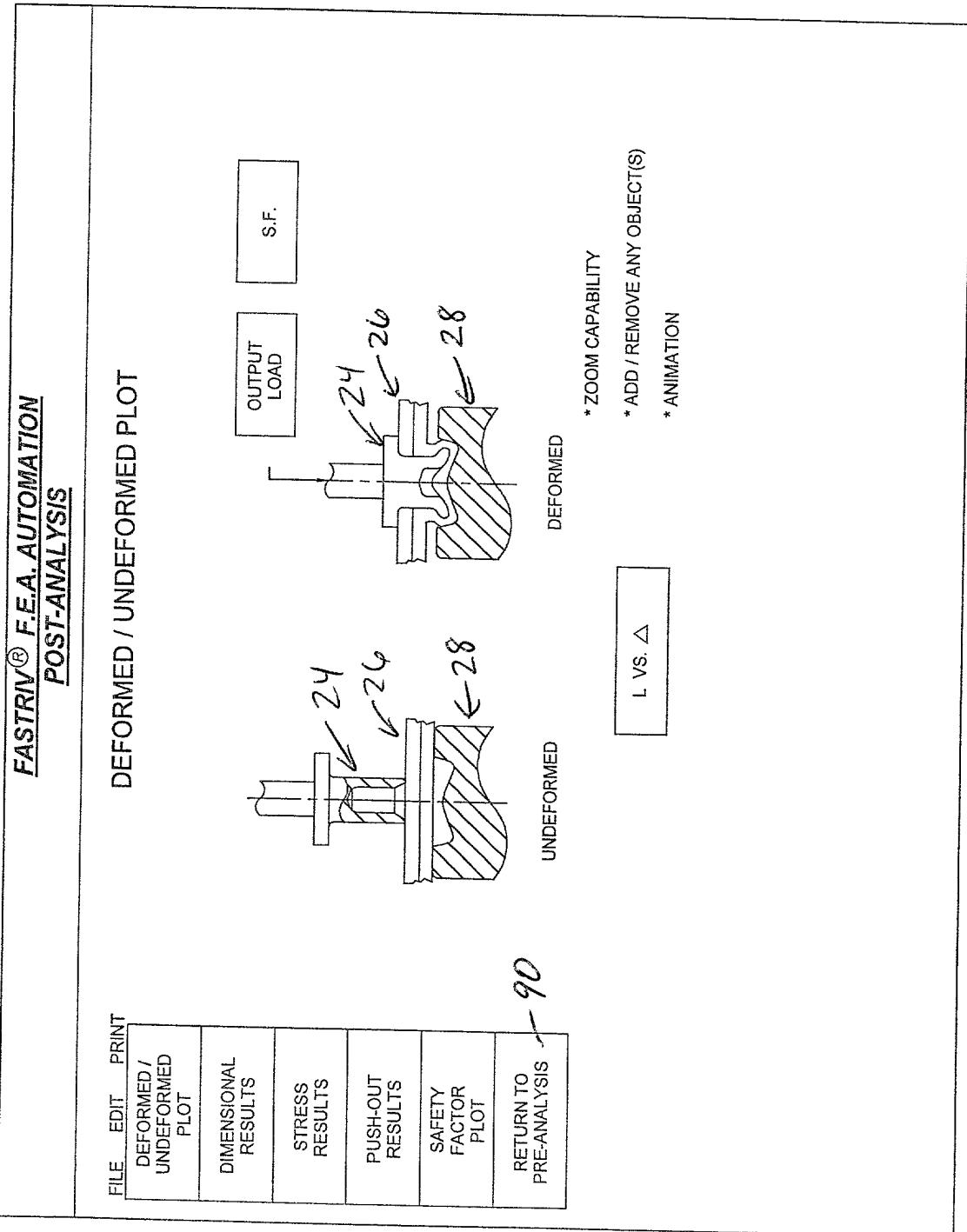
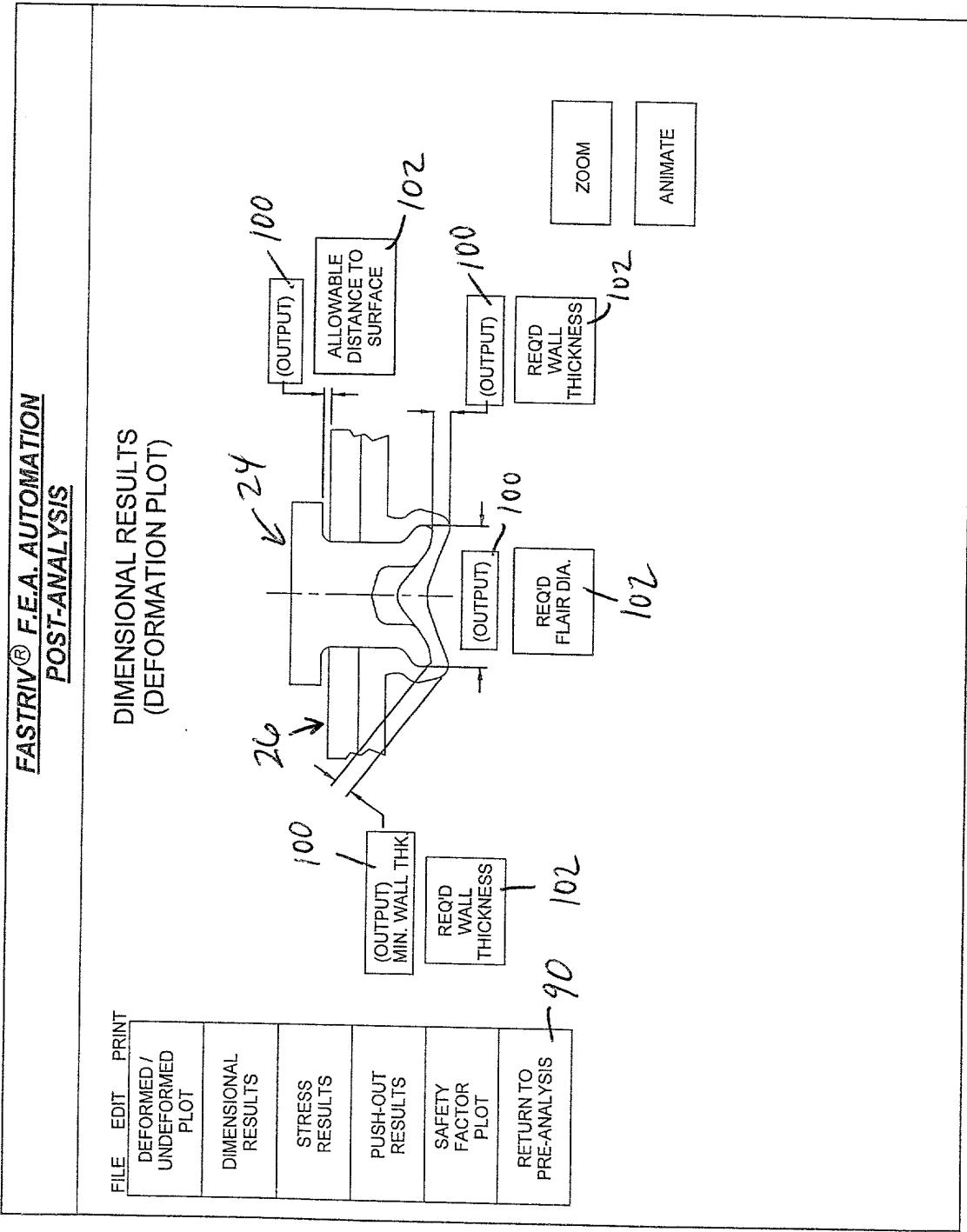


FIG. 13



FASTRIV® F.E.A. AUTOMATION
POST-ANALYSIS

FILE EDIT PRINT
DEFORMED / UNDEFORMED PLOT
DIMENSIONAL RESULTS
STRESS RESULTS
PUSH-OUT RESULTS
SAFETY FACTOR PLOT
RETURN TO PRE-ANALYSIS

STRESS RESULTS

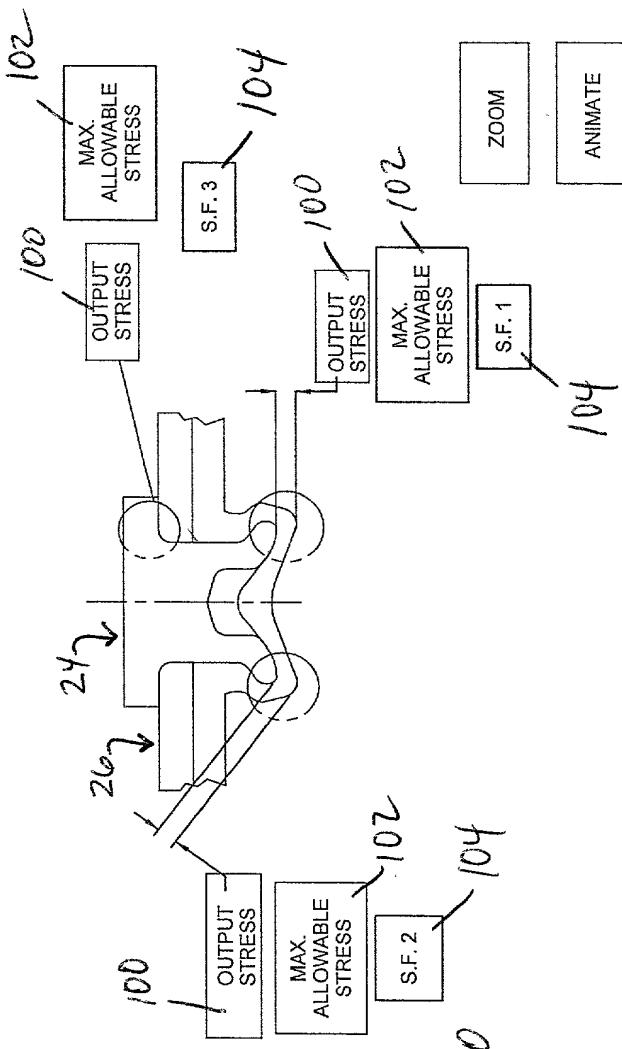


FIG. 15

FIG. 16

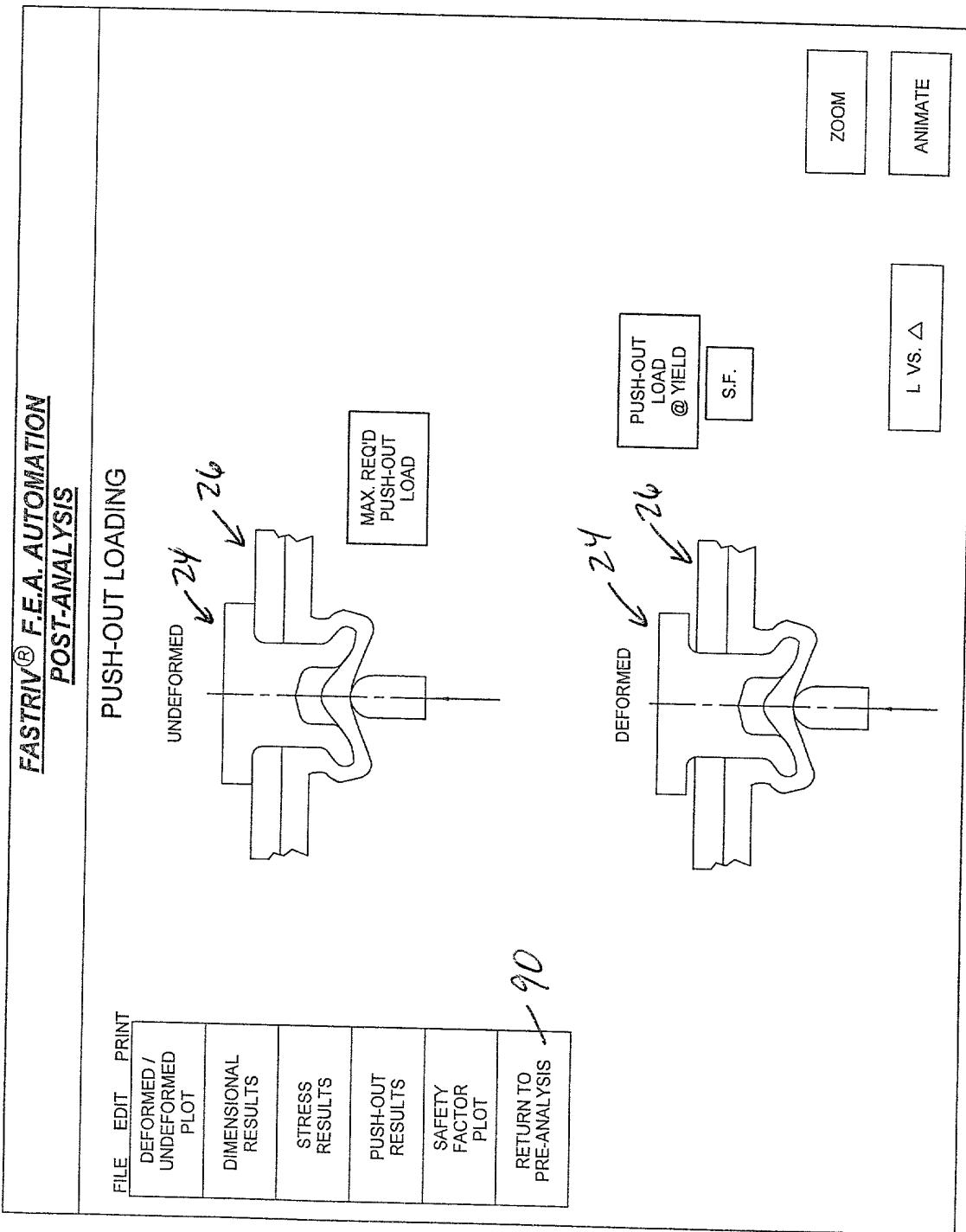


FIG. 17

